REMARKS

Applicant has thoroughly considered the Examiner's remarks and the application has been amended in light thereof. Claims 1-2, 4-9, 11-16 and 18-21 are presented in the application for further examination. Claims 1-2, 4-9, and 15 have been amended by this Amendment B. Reconsideration of the application as amended and in view of the following remarks is respectfully requested.

Objection to the Specification based on 35 U.S.C. § 132

Parts of the July 27, 2004 Amendment A to the specification were objected to based on 35 U.S.C. § 132 because the Examiner argued that they introduced new matter into the disclosure. Applicant respectfully disagrees with the Examiner and argues that the objected amendments do not constitute new subject matter because the application as originally filed on February 22, 2002 discloses the amended subject matter.

1. "Manufacturing"

The specification as originally filed provides adequate description and support for amendments relating to the use of the word "manufacturing". First, in the first paragraph of the Summary of the Invention, the specification discloses "a knowledge base contains a plurality of parameters which relate to embroidery designs and the process of **making** an embroidered fabric from an embroidered design (p. 2, ll. 19-22)." Second, the specification describes the invention having "one purpose of the expert system and method of this invention is to allow operators who wish to **produce an embroidered fabric** from an embroidery design (p. 4, ll. 16-19)..."

Third, the word "manufacture" is defined by Random House Webster's College Dictionary (1995) as "**to make or produce** by hand or machinery, esp. on a large scale." Consequently, Applicant argues that the specification as originally filed support amendments relating to the use of the word "manufacture or manufacturing."

2. "Relationship between operator, parameters, and related software"

The originally filed specification also provides adequate description and support for amendments in Amendment A relating to the "relationship between operator, parameters, and related software." First, in describing a relationship between the operator and parameter, the specification in the Summary of the Invention describes "the invention comprises an expert system for **assisting an operator** in analyzing embroidery parameters which will be used by an embroidery machine to create an embroidered fabric (p. 2, ll. 16-19). Second, the specification describes in Fig. 2 that "the screen initially **provides a prompt 201 to the operator to select** a project/fabric type. From this prompt 201, the operator is provided the ability to **select a parameter** for the project/fabric type from the pull down menu 202 (p. 7, ll. 23-27)." Third, in disclosing a relationship between parameters and the related software, the specification describes a "screen shot displays the defined parameters that are designated by the expert system **based on the operator's selection** of cotton/polyester woven in menu 202 (p. 7, ll. 29-31)." As such, Applicant respectfully argues that the original specification provides sufficient disclosure of subject matter of the interactions between the operator, parameters, and related software.

Therefore, Applicant requests the objection to the specification based on 35 U.S.C. § 132 be withdrawn.

Claim Rejections based on 35 U.S.C. § 112, first paragraph

Claims 1, 7, 8, 14, 15, and 21 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully argues that, in light of the above arguments regarding objection to the specification, the specification as originally filed discloses concepts of manufacturing and relationships between the operator, parameters, and the related software. In addition, "adequate description under the first paragraph of 35 U.S.C. § 112 does not require **literal** support for the claimed invention... Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an [applicant] had possession of the concept of what is claimed (emphasis in original)." Ex

parte Parks, 30 USPQ2d 1234 (B.P.A.I 1994). Hence, for at least the reasons provided above, Applicant submits that the originally filed disclosure conveyed to one having ordinary skill in the art that Applicant has possession of the concept of what is claimed.

Therefore, Applicant requests the rejection to claims 1, 7, 8, 14, 15, and 21 based on 35 U.S.C. § 112, first paragraph be withdrawn.

Claim Rejections based on 35 U.S.C. § 102 (b)

Claims 1, 2, 4-9, 11-16, and 18-21 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chen et al, IEEE 1063-6730/94 ("the Chen reference"). The Examiner cites various portions of the Chen reference as a basis for rejecting the claims. Applicant respectfully disagrees with the Examiner's reading of the Chen reference and understanding of the present invention. Applicant argues that the Examiner has not provided full weight to the language of the claims and that the Chen reference fails to teach, suggest, and/or anticipate each and every element of the present invention.

In essence, the Chen reference describes a software system **that generates stitch codes** for embroidery machines from embroidery designs (p. 692, col. 2). In addition, "in order to generate stitch codes automatically and rapidly for original designs, ... (1) the operating staff inputs the designs using a scanner, digitizer, or mouse; (2) once the original designs are entered, NeedlePaint processes, organizes and optimizes to **generate stitches automatically**; and (3) after stitches are generated, NeedlePaint **transforms stitches into specific codes corresponding to specific embroidery machines**. Id. Moreover, the Chen reference teaches a system whereby **"the defects of single performance of other punching systems have been overcome"** Id., at p. 695, col. 2.

In the contrary, the present invention does not produce stitch codes to be used in specific embroidery machines. Instead, the present invention as defined by each of claims 1, 8 and 15 relates to "generating one or more recommended manufacturing parameters" which parameters are defined as "parameters for making the embroidered fabric." Furthermore, the preamble of amended claims 1, 8 and 15 define the

parameters as "a parameter in at least one of the following categories: hooping technique, stabilization technique, topping material, backing material, thread weight, thread type, needle type, needle size, embroidery density, project/fabric type, fabric thickness, fabric density, fabric stretch and design size." Thus, manufacturing parameters for making the embroidered fabric as defined by the claims are **NOT** stitch codes.

1. "Editing"

Regarding claims 4, 11, and 18, the Examiner noted that the Chen reference teaches that an user of a system embodying the Chen reference allows for "editing [, which] provides the opportunity to adjust parameters such as fabric type which include fabric thickness and stretch characteristics following from the type of rules identified by Chen on page 694, c 2 and further implemented in Fig. 2 on p. 695" (Office action, p. 5-6).

Applicant respectfully argues that the Chen reference provides editing in the context of processing the scanned/inputted embroidery design, not editing parameters for making embroidered fabric. The Chen reference discloses that "in the Contour Processing Module, all contours including those extracted in the Image Processing Module, inputted from a digitizer, or created with a mouse, can be reconstructed by transforming and editing so that it can be much easier for stitches to be organized" (Chen, p. 693, col. 1). Furthermore, "in the Stitch Optimizing Module, the generated stitches can be transformed, edited, modified, and optimized as necessary in order to **improve the qualities of stitches.**" Id. Consequently, the NeedlePaint system generates stitch codes **automatically**. Id., at p. 695, col. 2.

Instead, the present invention does not reconstruct an inputted, scanned, or created image of an embroidered design. In addition, the present invention does not edit, modify, transform, or optimize stitches to improve the qualities of stitches. Instead, the present invention assists an operator of an embroidery machine and provides direction for making an embroidered fabric from an embroidery design. For example, when an operator selects cotton/polyester woven as a project/fabric and a defined parameters are medium fabric thickness and no fabric stretch, a system of the present

invention could provide a recommendation of an embroidery needle type, a needle size of 11-12, a thread weight of 40 weight, and a tear-away backing type (Specification, p. 6, ll. 29-33). Claims 1 and 15, as amended, recite in part, "a knowledge base of a plurality of parameters for making the embroidered fabric; [and] ... selection software responsive to the operator for permitting the operator to select a parameter from the plurality of parameters and for defining an additional parameter from the plurality of parameters where the defined parameter is a function of the operator selected parameter." Similarly, claim 8 recites in part "designating selected and defined parameters for making the embroidered fabric where the defined parameter is a function of the selected parameter." Therefore, the Chen reference fails to anticipate, teach, and/or suggest that one may edit, modify, transform, or optimize selected parameters for making the embroidered fabric because it relates to a system for generating stitch codes automatically and without modification.

2. "Knowledge bases"

Regarding claims 7, 14, and 21, while the Chen reference discusses the use of knowledge bases, such discussion relates to the context of producing stitch data ("Bases include data bases, knowledge bases and rule bases, all of which will record and store important and useful information and data **while NeedlePaint is running**" (Chen, p. 693, col. 2)). The Chen reference fails to anticipate, teach, or suggest that these bases include data or rules for **making embroidered fabric**. For example, the Chen reference teaches that "there are two kinds of knowledge in NeedlePaint: pattern and organizing knowledge" Id., at p. 694, col. 2. "By 'pattern' we mean stitch pattern, bean pattern and wave pattern..." Id. In addition, "the organizing knowledge determines the best paths and organizations of stitches **when region and stitch pattern are selected.**" Id.

Contrarily, the present invention provides a knowledge base including a plurality of parameters for making the embroidered fabric; not for stitch pattern, bean pattern, wave pattern, or for organizing best paths and organizations of stitches. For example, the preamble of amended claim 1 recites in part, "a parameter in at least one of the following categories: hooping technique, stabilization technique, topping material,

backing material, thread weight, thread type, needle type, needle size, embroidery density, project/fabric type, fabric thickness, fabric density, fabric stretch and design size." In addition, the amended claim 1 recites in part, "a knowledge base of a plurality of parameters for making the embroidered fabric; [and] ... selection software responsive to the operator for permitting the operator to select a parameter from the plurality of parameters and for defining an additional parameter from the plurality of parameters where the defined parameter is a function of the operator selected parameter." In addition, claim 2 further recites that the parameters may be in categories such as hooping technique, stabilization technique, topping material, or the like. Likewise, claims 8 and 15 provide similar recitals. Therefore, the Chen reference fails to anticipate a knowledge base containing parameters that are used for making an embroidered fabric.

3. "Rules"

Regarding claim 8, the Examiner further noted that the Chen reference discusses the use of rules and thus anticipates the present invention. Applicant respectfully argues that the rules used in the Chen reference are related to the "best stitch patterns and organizing methods [that] are selected in order to generate stitches based on **the geometrical shape of a region and the relationship of contours together with technological experience and knowledge**" (Chen, p. 694, col. 2; see also examples of Rules 018 to 022 and Fig. 2).

The present invention does not provide rules for generating stitches based on geometrical shape of a region and the relationship of contours of a region. Instead, the present invention provides rules of **various interrelationships between parameters and based on the experience of experts in the field of the art**" of making embroidered fabric (Specification, p. 6, ll. 17-19). In addition, amended claim 1 recites in part "a knowledge base of a plurality of parameters for making the embroidered fabric; a rules base of rules interrelating two or more of the parameters; [and] ... analysis software for applying the rules to the defined parameter and **for generating one or more recommended manufacturing parameters from the plurality of parameters**, where the recommended manufacturing parameter is a function of the

defined parameter." Claims 8 and 15 include similar recitals. Therefore, Applicant respectfully argues that the Chen reference fails to anticipate, teach, or suggest rules for interrelating parameters for making embroidered fabric.

In conclusion, for at least the above reasons, Applicant submits that the Chen reference fails to anticipate each and every element of the present invention. Applicant has amended the claims to clarify the present invention, for example, by amending claim 1 as "a computer-implemented system for assisting an operator of an embroidery machine to make an embroidered fabric from an embroidery design using a parameter in at least one of the following categories: hooping technique, stabilization technique, topping material, backing material, thread weight, thread type, needle type, needle size, embroidery density, project/fabric type, fabric thickness, fabric density, fabric stretch and design size". Therefore, rejection of these claims should be withdrawn. Further, the dependent claims that depend from these independent claims individually recite features, which in combination with the features of the independent claims, are also patentable. Therefore, rejection of these dependent claims should also be withdrawn.

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CONCLUSION

It is felt that a full and complete response has been made to the Office action and, as such, places the application in condition for allowance. Such allowance is hereby respectfully requested. If the Examiner feels, for any reason, that a personal interview will expedite the prosecution of this application, he is invited to telephone the undersigned.

Applicant does not believe that a fee is due. If, however, the Commissioner determines otherwise, such fees may be charged to Deposit Account No. 19-1345.

Respectfully submitted,

Frank R. Agovino, Reg. No. 27,416
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

FRA/ATY